Amendments to the Claims:

This listing of claims will replace all prior versions,

and listings, of claims in the application:

Listing of Claims:

Claims 1-9 (canceled)

Claim 10 (new):   A method of monitoring activity of a

subject comprising:

measuring, at a point on the subject, simultaneous

movement in two or more directions, at each of a

plurality of times during a time period;

calculating a first vector magnitude from a first

simultaneously measured movement at a first of the

plurality of times during the time period;

calculating a second vector magnitude from a second

simultaneously measured movement at a second of the

plurality of times during the time period;

storing in a memory of an activity monitor attached

to the subject, first and second values corresponding,

respectively, to the first vector magnitude and the

second vector magnitude; and

determining an activity level of the subject for

the time period from, at least, the first and second

stored values.

Claim 11 (new): The method of claim 10, wherein the

movement is measured by accelerometer, the movement

directions are orthogonal x-. y- and z- directions and

the first vector magnitude and the second vector

magnitude are determined according to the following

expression:

$$|a| = \sqrt{(ax^2 + ay^2 + az^2)},$$

where a_x, a_y and a_z are the movement measurements in

respective x-. y- and z- directions and a is the

magnitude of the resultant vector of such movement.

Claim 12 (new): The method of claim 11 wherein a

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plurality of stored values are used to determine the

activity level and each of the plurality of stored

values corresponds to a vector magnitude.

Claim 13 (new): The method of claim 12 wherein the

step of determining the activity level comprises summing

time integrals of the plurality of stored values.

Claim 14 (new): The method of claim 10 wherein the

step of determining the activity level comprises summing

time integrals of the first and second vector

magnitudes.

Claim 15 (new): The method of claim 10 wherein the

step of calculating a first vector magnitude from a

first simultaneously measured movement comprises

obtaining the first vector magnitude from a lookup

table.

Claim 16 (new): The method of claim 10 wherein the

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step of storing values corresponding to the first vector

magnitude comprises storing the direction of the

resultant of the vector of the first vector magnitude.

Claim 17 (new):   The method of claim 10 comprising the

step of transferring the first and second values to a

host system.

Claim 18 (new):   The method of claim 17, wherein the

host system is a personal computer.

Claim 19 (new):   The method of claim 16, wherein the

step of determining an activity level of the subject

takes place in the host system.

Claim 20 (new):   The method of claim 10, wherein the

data used to determine the activity level consists of

values corresponding to two or more vector magnitudes at

each of a corresponding two or more times during the

time period.

Claim 21 (new):   A method of monitoring activity of a subject comprising:

measuring, at a point on the subject, simultaneous movement in two or more directions, at each of a plurality of times during a time period;

calculating a plurality of vector magnitudes each from a respective one of the simultaneously measured movements;

storing in a memory of an activity monitor values corresponding, respectively, to the calculated vector magnitudes; and

transmitting at least a subset of the stored values to a device configured to determine an activity level of the subject.

Claim 22 (new):   The method of claim 21, wherein the movement is measured by accelerometer, the movement directions are orthogonal x-. y- and z- directions and the vector magnitudes are determined according to the

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following expression:

$$|a| = \sqrt{(ax^2 + ay^2 + az^2)},$$

where a_x, a_y and a_z are the movement measurements in

respective *x-*. *y-* and *z-* directions and a is the

magnitude of the resultant vector of such movement.

Claim 23 (new): The method of claim 21 wherein

determining the activity level comprises summing time

integrals of the plurality of stored values.

Claim 24 (new): An activity monitor comprising:

        a measurement unit including a plurality of motion

sensors for producing respective sensor signals

indicative of motion experienced thereby; and

        a processor operable to receive the sensor signals

from the measurement unit, and to process the sensor

signals in accordance with a predetermined method,

        wherein the processor is operable to process the

sensor signals as respective vector components to

produce a resultant vector and store values

corresponding to the magnitude of the resultant vector

at two or more points in time,

the activity monitor being attachable to a subject

without restricting movement of the subject.

Claim 25 (new): The activity monitor of claim 24,

wherein the movement is measured by accelerometer, the

movement directions are orthogonal x-. y- and z-

directions and the vector magnitudes are determined

according to the following expression:

$$|a| = \sqrt{(ax^2 + ay^2 + az^2)},$$

where a_x, a_y and a_z are the movement measurements in

respective x-. y- and z- directions and a is the

magnitude of the resultant vector of such movement.

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